





| AT 490 N   |  |  |  |  |  |  |
|--|--|--|--|--|--|--|
| Illumen CT   | ATEC DATENT AN   | D TRADEMARK OFFICE   |  |  |  |  |
| OMIED SI   | ATEST ATENT AN   | D Howelman Office  |  | Unit   | Commissioner<br>ted States Patent a<br>Wa  | for Patents<br>nd Tradema<br>shington, D |
| U.S. APPLICATION NO.   |  | FIRST NAMED  | APPLICANT  |  | ATTY. DOCKE  | ET NO.                                   |
|  | 62432  | FINKLESTE  | IN   | S  | 00786-40   | 0002                                     |
| 33.7.  |  |  |  | INTERNATIO   | ONAL APPLICATION I   | NO.                                      |
| J. PETER FASSE<br>225 FRANKLIN STREET<br>BOSTON, MA 02110 2804   |  |  |  | PCT/US99/18022   |  |  |
|  |  |  |  | I.A. FILING DAT  | E PRIOR  | UTY DATE                                 |
|  |  | •  |  | 06 AUG 99  | 9 07/  | AUG 98                                   |
| NOTIFIC  | ATION OF A   | CCEPTANCE OF AI<br>AND 37 CFR 1.49   |  | date maile  I UNDER 3  | שמות   |  |
| 1. The applicant is h  | ereby advised th   | at the United States Patent  | and Trademark  | Office in its  | capacity as  | a  |
|  |  | an Elected Office (37 C  |  |  |  | lentified                                |
|  |  | requirements of 35 U.S.C.  |  |  |  |  |
|  |  | nt and Trademark Office.   | ŕ  |  | •  | •  |
| O THE HEIMA SAME   | . Aliandian Ni   | ımber assigned to the appli  | antion is shown  | above and the  | e relevant date  | c are.                                   |
| 2. The United State  |  | nnuer assigned to the appr   |  |  | tror   | s arc.                                   |
|  | 04 JUNE 2001   | <del></del>  |  | JUNE 2001  |  |  |
|  | TE OF RECEIP   |  |  | RECEIPT O  |  |  |
| 35 U.S.C. 371(c  | (1) (c)(2) and (   | WAY DECITION BUTS  |  |  |  |  |
| A Filing Receipt (PT<br>ON THE FILING I<br>U.S.C. 371 REQUI<br>The filing date of the<br>(Article 11(3) and 3.   | TO-103X) will be RECEIPT AS TO REMENTS HAR Above-identified 5 U.S. C. 363).  | issued for the present app<br>HE "FILING DATE" IS<br>S BEEN RECEIVED IN<br>If application is the internal<br>Once the Filing Receipt has   | THE DATE ON<br>THE OFFICE.<br>tional filing date   | ourse. THE N WHICH THE THIS DAT of the internal                      | DATE APPE<br>HE LAST OF<br>E IS SHOWN<br>ational applica                                     | THE 3:<br>ABOV<br>tion                   |
| A Filing Receipt (PT<br>ON THE FILING I<br>U.S.C. 371 REQUI<br>The filing date of the<br>(Article 11(3) and 3.<br>Art Unit designated  | FO-103X) will be RECEIPT AS T. REMENTS HA e above-identified 5 U.S. C. 363). (thereon.   | e issued for the present app<br>HE "FILING DATE" IS<br>S BEEN RECEIVED IN<br>A application is the internal<br>Once the Filing Receipt has  | dication in due control of the CATE ON THE OFFICE.  The office of the control of  | ourse. THE N WHICH THE THIS DAT of the internal send all corre       | DATE APPE<br>HE LAST OF<br>E IS SHOWN<br>ational applica                                     | THE 3<br>ABOV<br>tion<br>the Grou        |
| A Filing Receipt (PT<br>ON THE FILING I<br>U.S.C. 371 REQUI<br>The filing date of the<br>(Article 11(3) and 3.<br>Art Unit designated  | FO-103X) will be RECEIPT AS TREMENTS HA e above-identificate 5 U.S. C. 363). (thereon.   | e issued for the present app<br>HE "FILING DATE" IS<br>S BEEN RECEIVED IN<br>d application is the internal<br>Once the Filing Receipt has<br>mination under 35 U.S.C.  | dication in due control of the CATE ON THE OFFICE.  The office of the control of  | ourse. THE N WHICH THE THIS DAT of the internal send all corre       | DATE APPE<br>HE LAST OF<br>TE IS SHOWN<br>ational applica<br>espondence to                   | THE 3<br>ABOV<br>tion<br>the Grou        |
| A Filing Receipt (PTON THE FILING I<br>U.S.C. 371 REQUITME filing date of the<br>(Article 11(3) and 3.<br>Art Unit designated  3. A request fo<br>application will be e  4. The following it   | ro-103X) will be RECEIPT AS TREMENTS HA a above-identified 5 U.S. C. 363). (thereon.  r immediate examined in turn.  ems have been re-   | e issued for the present app<br>HE "FILING DATE" IS<br>S BEEN RECEIVED IN<br>If application is the internal<br>Once the Filing Receipt has<br>mination under 35 U.S.C.   | dication in due control of the CATE ON THE OFFICE.  The office of the control of  | ourse. THE N WHICH THE THIS DAT of the internal send all corre       | DATE APPE<br>HE LAST OF<br>TE IS SHOWN<br>ational applica<br>espondence to                   | THE 3<br>ABOV<br>tion<br>the Grou        |
| A Filing Receipt (PTON THE FILING IN U.S.C. 371 REQUITE The filing date of the (Article 11(3) and 3. Art Unit designated  3. A request for application will be effectively.  4. The following it U.S. Basic in U.S.  | FO-103X) will be RECEIPT AS TREMENTS HAR above-identified 5 U.S. C. 363). (thereon.  Trimmediate examined in turn.  ems have been renational Fee.  | e issued for the present app HE "FILING DATE" IS S BEEN RECEIVED IN d application is the internal Once the Filing Receipt has mination under 35 U.S.C.   | dication in due control of the CATE ON THE OFFICE.  The office of the control of  | ourse. THE N WHICH THE THIS DAT of the internal send all corre       | DATE APPE<br>HE LAST OF<br>TE IS SHOWN<br>ational applica<br>espondence to                   | THE 3. ABOV                              |
| A Filing Receipt (PTON THE FILING IN U.S.C. 371 REQUITE The filing date of the (Article 11(3) and 3. Art Unit designated  3. A request for application will be educated in U.S. Basic in U.S. Basic in U.S. Copy of the  | ro-103X) will be RECEIPT AS TREMENTS HAE above-identified 5 U.S. C. 363). (thereon.  r immediate examined in turn.  ems have been renational Fee. international approximational approximation  | e issued for the present app HE "FILING DATE" IS S BEEN RECEIVED IN d application is the internal Once the Filing Receipt has mination under 35 U.S.C. ecceived:   | dication in due of THE DATE ON THE OFFICE. ional filing date is been received, 371(f) was received.  | ourse. THE N WHICH THE THIS DAT of the internal send all corre       | DATE APPE<br>HE LAST OF<br>TE IS SHOWN<br>ational applica<br>espondence to                   | THE 3<br>ABOV<br>tion<br>the Grou        |
| A Filing Receipt (PTON THE FILING IN U.S.C. 371 REQUITE The filing date of the (Article 11(3) and 3.  Art Unit designated  3. A request for application will be e  4. The following it U.S. Basic in U | ro-103X) will be RECEIPT AS TREMENTS HAE above-identified 5 U.S. C. 363). (thereon.  r immediate examined in turn.  ems have been renational Fee. international apport the  | e issued for the present app HE "FILING DATE" IS S BEEN RECEIVED IN d application is the internal Once the Filing Receipt has mination under 35 U.S.C. ecceived: plication. nal application into English   | dication in due of THE DATE ON THE OFFICE. ional filing date is been received, 371(f) was received.  | ourse. THE N WHICH THE THIS DAT of the internal send all corre       | DATE APPE<br>HE LAST OF<br>TE IS SHOWN<br>ational applica<br>espondence to                   | THE 3<br>ABOV<br>tion<br>the Grou        |
| A Filing Receipt (PTON THE FILING IN U.S.C. 371 REQUITE The filing date of the (Article 11(3) and 3.  Art Unit designated  3. A request for application will be easier in the following it will be used to the unit of the uni | ro-103X) will be RECEIPT AS TREMENTS HAR above-identified 5 U.S. C. 363). (thereon.  r immediate examined in turn.  ems have been renational Fee.  international applied the international applied the international characteristic properties.  | e issued for the present app HE "FILING DATE" IS S BEEN RECEIVED IN d application is the internal Once the Filing Receipt has mination under 35 U.S.C. ecceived: plication. hal application into English attors(s).  | dication in due of THE DATE ON THE OFFICE. ional filing date is been received, 371(f) was received.  | ourse. THE N WHICH THIS DAT of the internal send all corre           | DATE APPE<br>HE LAST OF<br>E IS SHOWN<br>ational applicates<br>espondence to the<br>FEB 2001 | THE 3 ABOV                               |
| A Filing Receipt (PTON THE FILING IN U.S.C. 371 REQUITE filing date of the (Article 11(3) and 3.  Art Unit designated  3. A request for application will be e  4. The following it  BUS. Basic in  Copy of the  Translation  Copy of Article 12(2) Article 12(2)  Copy of Article 22(2)  Copy of Article 23(2)  Copy of Article 2 | ro-103X) will be RECEIPT AS TO REMENTS HARE above-identified 5 U.S. C. 363). (of thereon.  The immediate examined in turn.  The same been represented in turn.   | e issued for the present app HE "FILING DATE" IS S BEEN RECEIVED IN d application is the internal Once the Filing Receipt has mination under 35 U.S.C. ecceived: plication nal application into English attors(s). ents. Translation of Art  | lication in due of THE DATE ON THE OFFICE. ional filing date is been received, 371(f) was received.  | ourse. THE N WHICH THIS DAT of the internal send all corre           | DATE APPE<br>HE LAST OF<br>E IS SHOWN<br>ational applicates<br>espondence to the<br>FEB 2001 | THE 3 ABOV                               |
| A Filing Receipt (PTON THE FILING I) U.S.C. 371 REQUI The filing date of the (Article 11(3) and 3. Art Unit designated  3. A request fo application will be e  4. The following it   | ro-103X) will be RECEIPT AS TREMENTS HARE above-identified 5 U.S. C. 363). (thereon.  r immediate examined in turn.  ems have been renational apport the international apport the internation of the internation of inventicle 19 amendments are article 19 amendments.  | e issued for the present app HE "FILING DATE" IS S BEEN RECEIVED IN d application is the internal Once the Filing Receipt has mination under 35 U.S.C. ecceived: plication hal application into English attors(s). ents. Translation of Art indments have not be   | dication in due of THE DATE ON THE OFFICE. Size of received, 371(f) was received.  | ourse. THE N WHICH TI THIS DAT of the internal send all corre ved on | DATE APPE<br>HE LAST OF<br>E IS SHOWN<br>ational applica<br>espondence to the<br>FEB 2001    | THE 3 ABOV                               |
| A Filing Receipt (PTON THE FILING IN U.S.C. 371 REQUITE The filing date of the (Article 11(3) and 3.  Art Unit designated  3. A request for application will be each of the will be each o | ro-103X) will be RECEIPT AS TREMENTS HARe above-identified 5 U.S. C. 363). (thereon.  r immediate examined in turn.  ems have been renational apport the international fee.  internation of inventicle 19 amendme examined 19 amen | e issued for the present app HE "FILING DATE" IS S BEEN RECEIVED IN d application is the internal Once the Filing Receipt has mination under 35 U.S.C. eccived: plication hal application into English hators(s). ents. Translation of Art ndments have have have  | dication in due of THE DATE ON THE OFFICE.  Siconal filing date  sie been received,  371(f) was received,  cicle 19 amendmeen entered.  English and its A  | ourse. THE N WHICH TI THIS DAT of the internal send all corre ved on | DATE APPE<br>HE LAST OF<br>E IS SHOWN<br>ational applica<br>espondence to the<br>FEB 2001    | THE 3 ABOV                               |
| A Filing Receipt (PTON THE FILING IN U.S.C. 371 REQUITE The filing date of the (Article 11(3) and 3.  Art Unit designated  3. A request for application will be e  4. The following it   | ro-103X) will be RECEIPT AS TREMENTS HA a above-identified 5 U.S. C. 363). (thereon.  r immediate examined in turn.  ems have been renational Fee.  international approof the internation of inventicle 19 amendme a Article 19 amendme a Article 19 amendme and preliminar Annexes to the   | e issued for the present app HE "FILING DATE" IS S BEEN RECEIVED IN d application is the internal Once the Filing Receipt has mination under 35 U.S.C. eccived: plication. had application into English attors(s). ents. Translation of Art indments have not be y Examination Report in E International Preliminary I   | dication in due of THE DATE OF THE OFFICE. Signal filing date is been received, and the control of the control  | ourse. THE N WHICH TI THIS DAT of the internal send all corre ved on | DATE APPE<br>HE LAST OF<br>E IS SHOWN<br>ational applica<br>espondence to the<br>FEB 2001    | THE 3 ABOV                               |
| A Filing Receipt (PTON THE FILING IN U.S.C. 371 REQUITME filing date of the (Article 11(3) and 3. Art Unit designated  3. A request for application will be e  4. The following it   | ro-103X) will be RECEIPT AS TREMENTS HA a above-identified 5 U.S. C. 363). (thereon.  r immediate examined in turn.  ems have been renational apport the international fee. internation of inventicle 19 amendme e Article 19 amendme e Article 19 amendme annexes to the Translation of A   | e issued for the present app HE "FILING DATE" IS S BEEN RECEIVED IN d application is the internation of the Filing Receipt has mination under 35 U.S.C. ecceived: plication. nal application into English ntors(s). ents. Translation of Art ndments have not be y Examination Report in E International Preliminary I unnexes to the IPER into E  | dication in due of THE DATE OF THE OFFICE. Signal filing date is been received, and the control of the control  | ourse. THE N WHICH TI THIS DAT of the internal send all corre ved on | DATE APPE<br>HE LAST OF<br>E IS SHOWN<br>ational applica<br>espondence to the<br>FEB 2001    | THE 3 ABOV                               |
| A Filing Receipt (PTON THE FILING I) U.S.C. 371 REQUI The filing date of the (Article 11(3) and 3. Art Unit designated  3. A request fo application will be e  4. The following it  W. U.S. Basic is  Copy of the Translation  Copy of Art  The  The Interna Copy of the   | ro-103X) will be RECEIPT AS TREMENTS HA a above-identified 5 U.S. C. 363). (thereon.  r immediate examined in turn.  ems have been renational Fee. international Appropriate 19 amendment in turn.  examined in turn.  | e issued for the present app HE "FILING DATE" IS S BEEN RECEIVED IN d application is the internation of the price of the p | lication in due of THE DATE ON THE OFFICE. Sional filing date is been received, 371(f) was received.  dicle 19 amendment of the control of th | ourse. THE N WHICH TI THIS DAT of the internal send all corre ved on | DATE APPE<br>HE LAST OF<br>E IS SHOWN<br>ational applica<br>espondence to the<br>FEB 2001    | THE 3<br>ABOV<br>tion<br>the Grou        |
| A Filing Receipt (PTON THE FILING IN U.S.C. 371 REQUITE filing date of the (Article 11(3) and 3.  Art Unit designated  3. A request for application will be e  4. The following it   | ro-103X) will be RECEIPT AS TO REMENTS HARE above-identified 5 U.S. C. 363). (athereon.  Trimmediate examined in turn.  The same been reconstructional Fee. international appropriate 19 amendment and Preliminar Annexes to the Translation of A amendment(s) fire amendment(s) fire reconstructional Preliminar Annexes to the Translation of A amendment(s) fire reconstructional Preliminar Annexes to the amendment(s) fire reconstructions are reconstructed and reconstructions are reconstructed and reconstructions are reconstructed and rec | e issued for the present app HE "FILING DATE" IS S BEEN RECEIVED IN d application is the internation Once the Filing Receipt has mination under 35 U.S.C. ecceived: plication. nal application into English nators(s). ents. Translation of Art ndments have not be y Examination Report in E International Preliminary II International International Preliminary II International Preliminary II Intern | dication in due of THE DATE ON THE OFFICE. Size of the office of the off | ourse. THE N WHICH TI THIS DAT of the internal send all corre ved on | DATE APPE<br>HE LAST OF<br>E IS SHOWN<br>ational applica<br>espondence to the<br>FEB 2001    | THE 3. ABOV                              |
| A Filing Receipt (PTON THE FILING IN U.S.C. 371 REQUITE filing date of the (Article 11(3) and 3.  Art Unit designated  3. A request for application will be e  4. The following it   | ro-103X) will be RECEIPT AS TREMENTS HAE above-identified 5 U.S. C. 363). (a thereon.  Trimmediate examined in turn.  The same been revenued in turn.  | e issued for the present app HE "FILING DATE" IS S BEEN RECEIVED IN d application is the internation of the price of the p | lication in due of THE DATE ON THE OFFICE. Sional filing date is been received, 371(f) was received.  dicle 19 amendment of the control of th | ourse. THE N WHICH TI THIS DAT of the internal send all corre ved on | DATE APPE<br>HE LAST OF<br>E IS SHOWN<br>ational applica<br>espondence to the<br>FEB 2001    | THE 3. ABOV                              |
| A Filing Receipt (PTON THE FILING IN U.S.C. 371 REQUITE filing date of the (Article 11(3) and 3.  Art Unit designated  3. A request for application will be each of the will be each of th | ro-103X) will be RECEIPT AS TO REMENTS HARE above-identified 5 U.S. C. 363). (athereon.  Trimmediate examined in turn.  The same been reconstructional Fee. international appropriate 19 amendment and Preliminar Annexes to the Translation of A amendment(s) find Disclosure State document.   | e issued for the present app HE "FILING DATE" IS S BEEN RECEIVED IN d application is the internation Once the Filing Receipt has mination under 35 U.S.C. eccived: plication nal application into English nators(s). ents. Translation of Art ndments have not be y Examination Report in E International Preliminary E International P In | dication in due of THE DATE ON THE OFFICE. Size of the office of the off | ourse. THE N WHICH TI THIS DAT of the internal send all corre ved on | DATE APPE<br>HE LAST OF<br>E IS SHOWN<br>ational applica<br>espondence to the<br>FEB 2001    | THE 3. ABOV                              |
| A Filing Receipt (PTON THE FILING IN U.S.C. 371 REQUITE Filing date of the (Article 11(3) and 3.  Art Unit designated  3. A request for application will be e  4. The following it   | ro-103X) will be RECEIPT AS TREMENTS HARE above-identified 5 U.S. C. 363). (of thereon.  Trimmediate examined in turn.  | e issued for the present app HE "FILING DATE" IS S BEEN RECEIVED IN d application is the internal Once the Filing Receipt has mination under 35 U.S.C. eccived: plication. nal application into English ators(s). ents. Translation of Art ndments have not be y Examination Report in E International Preliminary I unnexes to the IPER into E not been entered. ided   | dication in due of THE DATE ON THE OFFICE. Size of the office of the off | ourse. THE N WHICH TI THIS DAT of the internal send all corre ved on | DATE APPE<br>HE LAST OF<br>E IS SHOWN<br>ational applica<br>espondence to the<br>FEB 2001    | THE 3. ABOV                              |
| A Filing Receipt (PTON THE FILING IN U.S.C. 371 REQUITE Filing date of the (Article 11 (3) and 3.  Art Unit designated  3. A request for application will be each of the will be each of t | ro-103X) will be RECEIPT AS TREMENTS HARE above-identified 5 U.S. C. 363). (thereon.  r immediate examined in turn.  ems have been renational apport the international problem internation of the internation of the internation of laration of inventicle 19 amendment and Preliminar Annexes to the Translation of A es have the mandment(s) find Disclosure State document.  ttorney and/or Copecification filed  | e issued for the present app HE "FILING DATE" IS S BEEN RECEIVED IN d application is the internal Once the Filing Receipt has mination under 35 U.S.C. eccived: plication hal application into English hators(s). ents. Translation of Art indments have not be y Examination Report in E International Preliminary II international Preliminar | dication in due of THE DATE ON THE OFFICE. Size of the office of the off | ourse. THE N WHICH TI THIS DAT of the internal send all corre ved on | DATE APPE<br>HE LAST OF<br>E IS SHOWN<br>ational applica<br>espondence to the<br>FEB 2001    | THE 3. ABOV                              |
| A Filing Receipt (PTON THE FILING IN U.S.C. 371 REQUITE Filing date of the (Article 11(3) and 3.  Art Unit designated  3. A request for application will be education will be education will be education.  W. Copy of the Translation.  Copy of Art  The Internation.  Copy of the The Annexed.  Preliminary.  Information.  Assignment.  Power of A.  Substitute so Indication of  | ro-103X) will be RECEIPT AS TREMENTS HARE above-identified 5 U.S. C. 363). (thereon.  r immediate examined in turn.  ems have been renational Fee.  international approf the internation of A eschalar amendment(s) find a mendment(s) find in Disclosure State document.  ttorney and/or Copecification filed of Small Entity State in the internation of the inte | e issued for the present app HE "FILING DATE" IS S BEEN RECEIVED IN d application is the internal Once the Filing Receipt has mination under 35 U.S.C. eccived: plication hal application into English hators(s). ents. Translation of Art indments have not be y Examination Report in E International Preliminary II international Preliminar | dication in due of THE DATE ON THE OFFICE. Size of the office of the off | ourse. THE N WHICH TI THIS DAT of the internal send all corre ved on | DATE APPE<br>HE LAST OF<br>E IS SHOWN<br>ational applica<br>espondence to the<br>FEB 2001    | THE 3.<br>ABOV<br>tion                   |
| A Filing Receipt (PTON THE FILING IN U.S.C. 371 REQUITE Filing date of the (Article 11(3) and 3.  Art Unit designated  3. A request for application will be e  4. The following it   | ro-103X) will be RECEIPT AS TREMENTS HARE above-identified 5 U.S. C. 363). (thereon.  r immediate examined in turn.  ems have been renational Fee. international Appropriate 19 amendment 19 amendment 20 Article 19 Amendment 20 Ame | e issued for the present app HE "FILING DATE" IS S BEEN RECEIVED IN d application is the internation of the Filing Receipt has mination under 35 U.S.C. ecceived: plication. hal application into English attors(s). ents. Translation of Art mination Report in El International Preliminary II International Pre | dication in due of THE DATE ON THE OFFICE.  Signal filing date is been received,  371(f) was received,  cicle 19 amendment en entered.  English and its A Examination Republish.  and and  | ents into Engineers, if any  | DATE APPE HE LAST OF E IS SHOWN ational applica espondence to the FEB 2001                   | THE 38<br>ABOV<br>tion<br>the Grou       |
| A Filing Receipt (PTON THE FILING IN U.S.C. 371 REQUITE Filing date of the (Article 11(3) and 3.  Art Unit designated  3. A request for application will be e  4. The following it   | ro-103X) will be RECEIPT AS TREMENTS HARE above-identified 5 U.S. C. 363). (thereon.  r immediate examined in turn.  ems have been renational Fee. international Appropriate 19 amendment 19 amendment 20 Article 19 Amendment 20 Ame | e issued for the present app HE "FILING DATE" IS S BEEN RECEIVED IN d application is the internal Once the Filing Receipt has mination under 35 U.S.C. eccived: plication hal application into English hators(s). ents. Translation of Art indments have not be y Examination Report in E International Preliminary II international Preliminar | dication in due of THE DATE ON THE OFFICE.  Signal filing date is been received,  371(f) was received,  cicle 19 amendment en entered.  English and its A Examination Republish.  and and  | ents into Engineers, if any  | DATE APPE HE LAST OF E IS SHOWN ational applica espondence to the FEB 2001                   | THE 34 ABOV                              |

FORM PCT/DO/EO/903 (March 2001)

Telephone: 703-305-3738

Pat Book r, Paralegal